

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO.                           | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO. |
|---|-----------------|----------------------|---------------------------------|------------------|
| 09/806,304                                | 03/29/2001      | Alain Brochez        | BROC3001/JEK                    | 6723             |
| 7   | 7590 05/23/2003 |                      |                                 |                  |
| Bacon & Thomas 4th Floor 625 Slaters Lane |                 |                      | EXAMINER                        |                  |
|   |                 |                      | FLANDRO, RYAN M                 |                  |
| Alexandria, VA 22314                      |                 |                      | ART UNIT                        | PAPER NUMBER     |
|   |                 |                      | 3679<br>DATE MAILED: 05/23/2003 | 8                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   |                                 | <del>`</del>   |  |  |
|---|---|---------------------------------|--|--|--|
|   |   | Application No.                 | Applicant(s)   |  |  |
|   |   | 09/806,304                      | BROCHEZ, ALAIN   |  |  |
|   | Office Action Summary   | Examiner                        | Art Unit   |  |  |
|   |   | Ryan M Flandro                  | 3679   |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |                                 |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                                 |  |  |  |
| Status  | Responsive to communication(s) filed on 31.   | January 2003 and 26 February 20 | าดว  |  |  |
| 1)[🛛  | •   | ris action is non-final.        | <del>.000</del> .  |  |  |
| 2a)□  | , <del>_</del>  |                                 | rosecution as to the merits is                           |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims   |   |                                 |  |  |  |
| 4) Claim(s) 29-52 is/are pending in the application.  |   |                                 |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |                                 |  |  |  |
| 5) Claim(s) is/are allowed.   |   |                                 |  |  |  |
| 6)⊠ Claim(s) <u>32,33,35,36,39,41,44,47,49,51 and 52</u> is/are rejected.   |   |                                 |  |  |  |
| 7)⊠ Claim(s) <u>29-31,34,37,38,40,42,43,45,46,48 and 50</u> is/are objected to.   |   |                                 |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers   |   |                                 |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |                                 |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |                                 |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |                                 |  |  |  |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.   |   |                                 |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |   |                                 |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |   |                                 |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |   |                                 |  |  |  |
| 13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |                                 |  |  |  |
| a)⊠ All b)☐ Some * c)☐ None of:   |   |                                 |  |  |  |
|   | 1. Certified copies of the priority documen   |                                 |  |  |  |
|   | 2. Certified copies of the priority documents have been received in Application No  |                                 |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.  |   |                                 |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |   |                                 |  |  |  |
| a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  |   |                                 |  |  |  |
| Attachment(s)   |   |                                 |  |  |  |
| 2) Notice   | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal           | ry (PTO-413) Paper No(s)<br>Patent Application (PTO-152) |  |  |
| U.S. Patent and T   | rademark Office   |                                 |  |  |  |

PTO-326 (Rev. 04-01)

Application/Control Number: 09/806,304

Art Unit: 3679

#### **DETAILED ACTION**

#### Specification

1. The objections to the disclosure set forth in the previous Office action (paper no. 4) are withdrawn in light of Applicant's amendment (paper no. 6).

### Claim Objections

- 2. The objections to claims 1-4, 9, 21, 22, and 28 set forth in the previous Office action (paper no. 4) are hereby withdrawn in light of Applicant's amendments (paper nos. 6 and 7) canceling these claims.
- 3. Newly added claims 29-52 are, however, objected to because of the generally inconsistent use of terms for particular features throughout the claims. An example includes reference to the "locking element" in claim 30, reference to the "stop parts" in claim 33, and the "locking part" in claim 51, all of which refer to the same feature, as understood by the Examiner. Other instances of inconsistent use exist that are not particularly pointed out here. Appropriate correction is required.

# Claim Rejections - 35 USC § 112

4. The rejection of claims 1-28 set forth in the previous Office action (paper no. 4) under 35 U.S.C. §112, second paragraph, are hereby withdrawn in light of Applicant's amendments (paper nos. 6 and 7).

Application/Control Number: 09/806,304 Page 3

Art Unit: 3679

### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 36, 39, 44, 47, 51, and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Hustadt et al. (DE 42 05 377) (Hustadt).
  - a. Claim 44. Hustadt clearly shows and discloses a corner joint 1 for joining two frame side members 3,4 having attachment channels 19,20 and mitered end portions, said joint 1 including at least one corner piece 5 having two insert parts (bounded by countersurfaces 7 and 8) joined at connecting ends and positioned relative to one another at a predetermined angle, each insert part 7,8 configured and dimensioned to be received by the mitered end portions of a respective one of the attachment channels 19,20 of the side members 3,4; wherein the corner piece 5 and an outer surface of the attachment channels 19,20 are arranged such that there are no parallel surfaces corresponding to one another with the exception of interlocking zones configured to interlock the corner piece 5 and attachment channels 19,20 (see figures 1 and 3.) Note that the Examiner has read the term "interlocking zone" to broadly include nearly all of the outer portions of the insert parts 7,8 of the corner piece 5 of Hustadt.
  - b. Claim 47. Hustadt clearly shows and discloses a corner joint 1 for joining two frame side members 3,4 having attachment channels 19,20 and mitered end portions, said joint 1 including at least one corner piece 5 having two insert parts (bounded by

Application/Control Number: 09/806,304

Art Unit: 3679

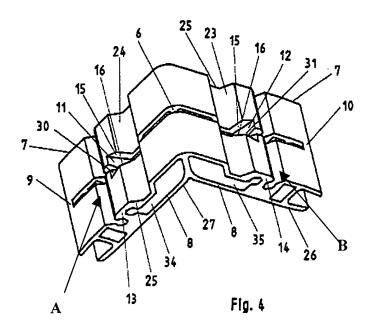
countersurfaces 7 and 8) joined at connecting ends and positioned relative to one another at a predetermined angle, each insert part 7,8 configured and dimensioned to be received by the mitered end portions of a respective one of the attachment channels 19,20 of the side members 3,4; wherein the corner piece 5 includes a clearance 34,35 generally defined at an inside corner where the insert parts 7,8 connect, whereby said clearance 34,35 makes it possible to push away any burrs which may be present on the side members 3,4 (see figures 1, 3, and 4). As to this last limitation, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

c. Claims 36 and 51. Hustadt, as applied above, shows a corner piece 1 having two insert parts (bounded by countersurfaces 7 and 8) each arranged to connect at a connecting end to another insert part 7,8 at a predetermined angle, each insert part 7,8 configured and dimensioned to be received by an attachment channel 19,20 of a side member 3,4, each insert part 7,8 comprising a locking part 30,31 extending from one side of the insert part 7,8; an inclined part A,B (see annotated figure 4 below) extending from the insert part 7,8 at an incline relative to the locking part 30,31, said inclined part A,B arranged to extend further in length from the connecting end than the locking part 30,31,

Application/Control Number: 09/806,304

Art Unit: 3679

wherein the inclined part A,B defines a leg that extends to connect with another leg 13,14 connecting to the locking part 30,31 (see below).



- d. Claim 39. Hustadt shows and discloses the locking part includes lips 21,22 arranged to be pressed in a slanting direction relative to the longitudinal axis of an attachment channel 19,20, said lips 21,22 having a free end 28,29 of each lip 21,22 being situated behind a central axis of a respective inclined part 30,31 (see figure 3).
- e. Claim 52. Hustadt clearly shows and discloses a corner joint 1 for joining two frame side members 3,4 having attachment channels 19,20 and mitered end portions, said joint 1 including at least one corner piece 5 having two insert parts (bounded by countersurfaces 7 and 8) joined at connecting ends and positioned relative to one another at a predetermined angle, each insert part 7,8 configured and dimensioned to be received by the mitered end portions of a respective one of the attachment channels 19,20 of the side members 3,4. Under the principles of inherency, if a prior art device, in its normal

Application/Control Number: 09/806,304

Art Unit: 3679

and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification, it can be assumed the device will inherently perform the same process. *In re King*, 802 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). Here, Hustadt clearly shows the step of forming the side members 3,4 to a predetermined shape to include bent lips 21,22 directed at an incline towards a longitudinal axis of the attachment channels 19,20 (see figures 1 and 3).

### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 32, 33, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hustadt et al. (DE 42 05 377) (Hustadt) in view of one of Kreusel (DE 23 32 890) and Pooley (GB 2062159).
  - a. Claim 32. Hustadt clearly shows and discloses a corner joint 1 for joining two frame side members 3,4 having attachment channels 19,20 and mitered end portions, said joint 1 including at least one corner piece 5 having two insert parts (bounded by countersurfaces 7 and 8) joined at connecting ends and positioned relative to one another at a predetermined angle, each insert part 7,8 configured and dimensioned to be received

Application/Control Number: 09/806,304

Art Unit: 3679

by the mitered end portions of a respective one of the attachment channels 19,20 of the side members 3,4; wherein the corner joint 1 includes locking means (including features 21,22, and 28-31) including at least one upset material part in the shape of a lip that is made by means of slantingly pressed in parts 21,22 of the attachment channels 19,20 of the side members 3,4; and wherein said lip 21,22 includes a contact surface 28,29 disposed at one end thereof which is arranged to cooperate with a contact side 30,31 of the insert part 7,8 (see figures 1, 3, 4).

- i. Hustadt lacks disclosure of the insert parts including at least one stop part arranged to press the lip.
- ii. Kreusel, however, teaches insert parts 1,2 including at least one stop part 5,6 arranged to press a lip (crimped end portion of 17a,18a in figure 2), for the purpose of locking insert parts 3,4 within attachment channels 17a,18a (figure 2).
- iii. Alternatively, Pooley teaches that it is common in the art to include insert parts 22 including at least one stop part 24 arranged to press the lip 26 (see especially figure 2; column 2 lines 101-114) when a crimping mechanism is used to allow tight engagement of the locking means.
- iv. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the corner piece of Hustadt by providing a stop part arranged to press the lip in order to provide a more secure attachment as taught by either Kreusel or Pooley.

Application/Control Number: 09/806,304

Art Unit: 3679

b. Claim 33. The combination of Hustadt and Kreusel, as set forth above, includes the stop parts 5-6 being only connected to the rest of the corner piece 10 at their base (see Kreusel figures 1 and 2).

- c. Claim 41. The combination of Hustadt and one of Kreusel and Pooley, as set forth above, includes the insert parts 7 each include a resilient element 26 connected at one end to one end of a resilient element 27 of the corresponding insert part 8 (see figures 3 and 4).
- 29. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hustadt, as applied above, in view of Borys (US 4,651,482). Hustadt clearly shows and discloses a corner joint 1 for joining two frame side members 3,4 having attachment channels 19,20 and mitered end portions, said joint 1 including at least one corner piece 5 having two insert parts (bounded by countersurfaces 7 and 8) joined at connecting ends and positioned relative to one another at a predetermined angle, each insert part 7,8 configured and dimensioned to be received by the mitered end portions of a respective one of the attachment channels 19,20 of the side members 3,4. Hustadt lacks disclosure of a filling compound being provided in the attachment channel before an insert part is placed in the attachment channel of each respective side member. Borys, however, teaches the step of before an insert part 20,22 is placed in an attachment channel of a respective side member 12,14, a filling compound 16 is provided in the attachment channel in order to seal any gaps by which ambient moisture could enter (see figures 1-3; column 2 lines 10-37; column 2 line 63 column 4 line 53). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the corner joint of

Application/Control Number: 09/806,304

Art Unit: 3679

Hustadt by providing a filler in the attachment channels in order to provide a seal against moisture as taught by Borys.

Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hustadt, as 10. applied above, in view of Leopold (US 4,530,195). Hustadt clearly shows and discloses a corner joint 1 for joining two frame side members 3,4 having attachment channels 19,20 and mitered end portions, said joint 1 including at least one corner piece 5 having two insert parts (bounded by countersurfaces 7 and 8) joined at connecting ends and positioned relative to one another at a predetermined angle, each insert part 7,8 configured and dimensioned to be received by the mitered end portions of a respective one of the attachment channels 19,20 of the side members 3.4. Hustadt lacks disclosure of the connecting ends of the insert parts being connected with a hinge. Leopold, however, teaches the connecting ends of insert parts 82,84 being connected with a hinge 86 in order to "connect the body portions together to enable pivoting motion of the segments about the juncture and a connecting arrangement for securing the body portions in place with respect to each other when the frame segments are in final desired orientation (see figures 6-8; column 7 lines 36-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the corner joint of Hustadt by providing a hinge at the connection of the insert parts in order to provide the ability to pivot the insert parts with respect to one another as taught by Leopold.

Application/Control Number: 09/806,304 Page 10

Art Unit: 3679

#### Response to Arguments

11. First and foremost, the Examiner wishes to respectfully thank Applicant's representative for providing a claim chart showing the relationship between the newly added claims and the original claims.

- 12. Second, upon reconsideration of the prior art of records and newly discovered prior art references, the subject matter indicated as allowable in the prior Office action (paper no. 4) has been amended as set forth herein. The Examiner agrees with Applicant's assertion as to the allowability of added claim 45 (paper no. 6, pages 5-6), but disagrees with the assertion that Hustadt does not disclose the limitations of claim 36 (paper no. 6, page 5). The rejection set forth above in paragraph 6(c) describes how Hustadt does in fact read on each limitation of claim 36.
- 13. Third, Applicant's statement that "[t]he subject matter of original claim 20 was incorporated into claim 21 containing allowable subject matter" is correct and the combination forms the limitations for newly added claim 46 which is indicated as allowable below.
- 14. Fourth, Applicant's arguments with respect to newly added claims 32 and 33 (formerly claims 5 and 6) is most in view of the new grounds of rejection.

Application/Control Number: 09/806,304 Page 11

Art Unit: 3679

## Allowable Subject Matter

15. Claims 29-31, 34, 45, 46, and 48 would be allowable if rewritten or amended to overcome the objections set forth in this Office action (see paragraph 3 above).

- 16. Claims 37, 38, 40, 42, 43, 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 17. The following is a statement of reasons for the indication of allowable subject matter:
  - a. Claims 29 and 48. The prior art, including the aforementioned references, either alone or in combination, fails to disclose or teach an oblique part connected at one end of a resilient element of an insert part, the first side of the oblique part is arranged to be in register with a locking device disposed along an outer surface of the attachment channel. The prior art also does not disclose that a second side of the oblique part is arranged to be disposed along an inner surface of the attachment channel thereby placing the respective resilient element in tension when inserted into the attachment channel. Claim 48 depends from claim 29 and is, therefore, allowable on the same grounds.
  - b. Claims 30 and 31. The prior art, including the aforementioned references, either alone or in combination, fails to disclose or teach the notches disposed at one end of the locking element described in claims 30 and 31. Claim 34 depends from claim 31 and is, therefore, allowable on the same grounds.

Application/Control Number: 09/806,304

Art Unit: 3679

c. Claims 37 and 38. The prior art, including the aforementioned references, either alone or in combination, fails to disclose or teach a plurality of wedges in register with a center portion of the inclined part.

- d. Claim 40. The prior art, including the aforementioned references, either alone or in combination, fails to disclose or teach the inclined part generally forming a triangle with a second leg that extends against a second side of the attachment channel and a third leg that links to the second leg and the inclined part.
- e. Claims 42 and 43 are indicated as allowable for substantially the same reasons as claim 29.
- f. Claim 45. The prior art, including the aforementioned references, either alone or in combination, fails to disclose or teach a clearance between the outer surface of the attachment channel and the insert part when the corner part is inserted into at least one attachment channel, the clearance generally extending from the locking part to at least the connecting end of the insert part.
- g. Claim 46. The prior art, including the aforementioned references, either alone or in combination, fails to disclose or teach positioning elements having any of the elements described therein.
- h. Claim 50. The prior art, including the aforementioned references, either alone or in combination, fails to disclose or teach insert parts having hook shaped protrusions defined at the connecting ends arranged to pivotably connect to the other insert part.

Application/Control Number: 09/806,304

Art Unit: 3679

#### Conclusion

18. This action is NON-FINAL because of the new grounds of rejection presented herein. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952. The examiner can normally be reached on 8:30am - 5:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Ryan M. Flandro May 15, 2003

Lynne H. Browne
Supervisory Patent Examiner

**Technology Center 3670**